Curriculum Vitae



Kishore Debnath, Ph.D.

Assistant Professor

Department of Mechanical Engineering
NATIONAL INSTITUTE OF TECHNOLOGY MEGHALAYA
Bijni Complex, Laitumkhrah, Shillong - 793 003
MEGHALAYA, INDIA



 $\begin{array}{l} \textbf{Contact No.} + 91\text{-}94\text{-}021\text{-}02378 \ (O), + 91\text{-}81\text{-}318\text{-}33728 \ (R) \\ \textbf{E-mail:} \ debnath.iitr@gmail.com, kishoredebnath@nitm.ac.in \\ \end{array}$

Personal Website: https://sites.google.com/site/debnathiitr/home

Official Website: http://nitmeghalaya.in/nitm_web/fp/faculty_profile.php?fid=107 ResearchGate Profile: https://www.researchgate.net/profile/Kishore_Debnath2

Personal Information

Nationality : Indian Marital Status : Single

Date of Birth : November 28, 1986

Present Address : C/O: Ms. B. Shadap, Bhagyakul, Laitumkhrah, Shillong – 793 003,

Meghalaya, India

Permanent : House No. 408, Ward No. 17, Khayerpur - 799 008, Agartala (West),

Address Tripura, India

| Educational Background | | |
|-------------------------------------|---|------|
| DEGREE / EXAMINATION | INSTITUTE / BOARD | YEAR |
| Doctor of Philosophy (Ph.D.) | Indian Institute of Technology Roorkee | 2015 |
| Master of Technology (M.Tech.) | National Institute of Technology Rourkela | 2011 |
| Bachelor of Engineering (B.E.) | National Institute of Technology Agartala | 2008 |
| Higher Secondary Examination (12th) | Tripura Board of Secondary Education | 2004 |
| Secondary Examination (10th) | Tripura Board of Secondary Education | 2002 |

Research Interests

- ☐ Composite Materials
- ☐ Green Composites
- ☐ Biodegradable Polymers
- ☐ Composite Interfaces
- ☐ Manufacturing of Composite Materials
- ☐ Mechanical Behavior of Materials
- ☐ Wear and Friction of Polymeric Materials
- ☐ Design and Development of Cutting Tools
- ☐ Machining Behavior of Materials
- ☐ Vibration-Assisted Machining
- ☐ Hybrid Machining and Micro-Machining
- ☐ Advanced Machining Methods
- ☐ Finite Element Analysis
- ☐ Design of Experiments
- ☐ Optimization Techniques etc.

Accolades and Achievements

- □ Recipient of "Partial Financial Assistance" funded by CSIR, Govt. of India to Attend the Twenty-Fifth International Conference on Processing and Fabrication of Advanced Materials (PFAM XXV) Held at The University of Auckland, Auckland, New Zealand during January 22-25, 2017.
- ☐ Recipient of "International Travel Support" funded by SERB-DST, Govt. of India to Attend the International Symposium on Green Manufacturing and Applications (ISGMA-2014) Held at Busan, South Korea during June 24-28, 2014.
- □ Recipient of "Ministry of Human Resource Development Fellowship", Govt. of India during Ph.D. at Indian Institute of Technology Roorkee, India, July, 2011 to June 2015.
- □ Recipient of "Ministry of Human Resource Development Fellowship", Govt. of India during M.Tech at National Institute of Technology Rourkela, India, July, 2009 to June, 2011.
- ☐ Qualified "Graduate Aptitude Test in Engineering (GATE)" in Mechanical Engineering, 2009
- □ Recipient of "Dr. B.R. Ambedkar Memorial Award 2005" for Commendable Performance in the Higher Secondary Examination (12th) (Second in School).
- □ Recipient of "Dr. B.R. Ambedkar Memorial Award 2003" for Commendable Performance in the Madhyamik Examination (10th) (First in School).

Professional Experience

A. Assistant Professor

Department of Mechanical Engineering National Institute of Technology Meghalaya

COURSES TAUGHT

- ☐ Strength of Materials (ME 201) [3]
- ☐ Engineering Materials (ME 205) [2]
- ☐ Manufacturing Technology I (ME 208) [1]
- ☐ Mechanical Laboratory II (ME 213) [1]
- ☐ Manufacturing Technology II (ME 303) [2]
- ☐ Machine Drawing (ME 311) [1]
- ☐ Mechanical Laboratory IV (ME 313) [1]
- ☐ Composite Materials (ME 436) [1]

B. Teaching Assistant

Department of Mechanical and Industrial Engineering Indian Institute of Technology Roorkee

COURSES TAUGHT

- ☐ Manufacturing Technology Laboratory [1]
- ☐ Dynamics of Machines Laboratory [1]
- ☐ Mechanical Engineering Drawing [1]
- □ Work Science Laboratory [1]

C. Teaching Assistant

Department of Mechanical Engineering National Institute of Technology Rourkela

COURSES TAUGHT

☐ Engineering Drawing (AutoCAD) [1]

Period: July 16, 2015 to Present

Period: July, 2011 to June 2015

Period: July, 2010 to June, 2011

Page 2 of 11

^{*} Number of Times Taught

Review Assignments A. REVIEWER OF THE FOLLOWING JOURNALS ☐ Heliyon [ELSEVIER] [1 Manuscript] □ Polymer Composites [WILEY] [6 Manuscripts] ☐ Composites Part B: Engineering [ELSEVIER] [1 Manuscript] ☐ Journal of Industrial Textiles [SAGE] [5 Manuscripts] ☐ IMechE, Part B: Journal of Engineering Manufacture [SAGE] [7 Manuscripts] ☐ IMechE, Part C: Journal of Mechanical Engineering Science [SAGE] [1 Manuscript] ☐ IMechE, Part L: Journal of Materials: Design and Applications [SAGE] [1 Manuscript] ☐ IMechE, Part J: Journal of Engineering Tribology [SAGE] [1 Manuscript] ☐ International Multidisciplinary Research Journal [EAR] [1 Manuscript] ☐ The Open Construction & Building Technology Journal [BENTHAM] [1 Manuscript] ☐ International Journal of Surface Engineering and Interdisciplinary Materials Science [IGI GLOBAL] [1 Manuscript] ☐ International Journal of Measurement Technologies and Instrumentation Engineering [IGI GLOBAL] [1 Manuscript] **B. REVIEWER OF THE FOLLOWING CONFERENCES** ☐ Global Conference on Polymer and Composite Materials [PCM-2017] [1 Manuscript] ☐ Global Conference on Polymer and Composite Materials [**PCM-2016**] [2 Manuscripts] ☐ Global Conference on Polymer and Composite Materials [PCM-2015] [3 Manuscripts] ☐ Third International Multicomponent Polymer Conference [MPC-2012] [1 Manuscript] C. REVIEWER OF THE FOLLOWING BOOKS ☐ Strength of Materials [CAMBRIDGE UNIVERSITY PRESS, INDIA] [3 Chapters] ☐ Manufacturing Processes: Casting, Forming and Welding [CAMBRIDGE UNIVERSITY PRESS, INDIA] [2 Chapters] **Other Assignments** ☐ Question Paper Setter of "QIS College of Engineering and Technology", Affiliated to Jawaharlal Nehru Technological University, Kakinada 2017. ☐ Member, Technical Committee, 1st International e-Conference on Reliable Technologies in Institutional and Industrial Research (ICRTIIR 2017), January 7-8, 2017. ☐ Member, Program/Scientific Committee, International Conference on Conscientious and Unimpeachable Technologies (ICCUT 2016), December 24-25, 2016. **Administrative Responsibilities** A. AT INSTITUTE LEVEL ☐ **Member,** Examination Committee of the Institute [July 31, 2015 - Present] ☐ **Member,** N.S.S. Committee of the Institute [Sept. 24, 2015 - Present] [Oct. 2015] ☐ **Member,** Convocation Invitation & Reception Sub-Committee

☐ Convenor, Convocation Accommodation & Hospitality Sub-Committee

☐ Member, Convocation Accommodation & Hospitality Sub-Committee

☐ **Member,** Screening Committee for the Recruitment of MTS (Fitter)

☐ **Member**, Institute Ranking Data Preparation Committee

B. AT DEPARTMENT LEVEL

☐ **Faculty-in-Charge**, Workshop

☐ External Member, Departmental (EE) Research Committee

[Dec. 2015]

Page 3 of 11

[June, 2016]

[Sept., 2016]

[June, 2017]

[March 17, 2017 - Present]

[July 16, 2015 - Present]

| ☐ Member, Screening Committee for the Recruitment of Technical Ass | sistant [Dec. 2015] | |
|---|--------------------------|--|
| ☐ Member, Physical Verification of Departmental Stock | [Dec. 2015] | |
| ☐ Member, Grade Evaluation Committee | [Dec. 2015, Dec. 2016] | |
| ☐ Member, Screening & Selection Committee for PhD Enrolment | [Jan., 2016, July, 2016] | |
| ☐ Member, Screening Committee for the Recruitment of Trainee Engi | neer [July, 2016] | |
| ☐ Mentor Faculty, for 1 st Year B.Tech. Students | [Sept., 2016] | |
| ☐ Member , Tender Opening Committee | [Nov. 2016] | |
| ☐ Member, Student Appeal Committee | [Dec. 2016] | |
| ☐ Faculty Coordinator, for the 4th Year B.Tech. Students | [Jan., 2017-Present] | |

Invited Lectures

- □ Delivered a Talk on 'Make in India: Research in Machining' during the AICTE Sponsored Short Term Course on "Make in India: Dreams to Reality" Organized by the Department of Mechanical and Industrial Engineering, Indian Institute of Technology Roorkee, India, January 03-14, 2017.
- Delivered an Invited Talk on 'Innovation in Engineering Good Quality Holes in Composite Materials' during the National Seminar on "Advanced Materials and Processing" Organized by the Department of Mechanical Engineering, Government Engineering College Bikaner, Rajasthan, India, April 22-23, 2016.
- □ Delivered an Invited Talk on 'Drilling Behavior of Natural Fiber-Reinforced Composites: Challenges and Opportunities' in the Department of Mechanical Engineering at Changwon National University, Changwon, South Korea, June 24, 2014.

Short-Term / Special Courses Attended

- □ AICTE Sponsored Short Term Course on "Make in India: Dreams to Reality" Organized by the Department of Mechanical and Industrial Engineering, Indian Institute of Technology Roorkee, India, January 03-14, 2017.
- □ KIC-TEQIP Sponsored Short Term Course on "Advanced Gear Engineering" Organized by the Department of Mechanical Engineering, Indian Institute of Technology Guwahati, India, November 21-22, 2015.
- □ Two days Conclave of Head of Mechanical Engineering on "Mechanical Engineering Conclave: Boosting for Academic, Research, Innovation and Socio-economic Development in the Region of All NITs of India" Organized by the Department of Mechanical Engineering, National Institute of Technology Agartala, India, October 09-10, 2015.
- ☐ Faculty Development Program on "Composite Materials: Machining Issues and Technical Advancements" Organized by the Department of Mechanical Engineering, ITS Engineering College, Greater Noida, India, February 28, 2015.
- □ QIP Workshop on "Advances in Surface Modification Technologies: Friction Stir Processing" Organized by the Department of Mechanical and Industrial Engineering, Indian Institute of Technology Roorkee, India, November 30, 2013.
- □ QIP Workshop on "Ultrasonic Machining Approach to Fabrication of Micro-channels" Organized by the Department of Mechanical and Industrial Engineering, Indian Institute of Technology Roorkee, India, March 13, 2013.
- □ QIP Workshop on "A Novel Approach to Processing of Green Composites" Organized by the Department of Mechanical and Industrial Engineering, Indian Institute of Technology Roorkee, India, March 09, 2013.

- □ Library Orientation Program and Workshop on "Scopus and ScienceDirect" Organized by the Mahatma Gandhi Central Library, Indian Institute of Technology Roorkee, India, February 27, 2012.
- ☐ Short Term Practical Training at **Burn Standards Co. Ltd.**, Howrah, India, June 08-28, 2007.

Conferences Attended

- □ Twenty-Fifth International Conference on Processing and Fabrication of Advanced Materials (PFAM - XXV), The University of Auckland, Auckland, New Zealand, January 22-25, 2017.
- ☐ Twenty-Fourth International Symposium on Processing and Fabrication of Advanced Materials (PFAM XXIV), Kansai University, Osaka, Japan, December 18-20, 2015.
- □ National Conference on Latest Developments in Materials, Manufacturing and Quality Control (MMQC 2015), Giani Zail Singh Punjab Technical University Campus, Bathinda, India, February 19-20, 2015.
- □ Twenty-Third International Conference on Processing and Fabrication of Advanced Materials (PFAM XXIII), Indian Institute of Technology Roorkee, India, December 5-7, 2014.
- ☐ International Symposium on Green Manufacturing and Applications (ISGMA 2014), Busan, South Korea, June 24-28, 2014.
- □ 4th International and 25th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2012), Jadavpur University, India, December 14-16, 2012.
- □ Twenty-First International Symposium on Processing and Fabrication of Advanced Materials (PFAM - XXI), Indian Institute of Technology Guwahati, India, December 10-13, 2012.
- □ International Conference on Advances in Polymer Science and Rubber Technology (APSRT 2011), Indian Institute of Technology Kharagpur, India, March 3-5, 2011.

LIST OF PUBLICATIONS

JOURNALS

- [J-1] K. Debnath, I. Singh, and T.S. Srivatsan. An Innovative Tool for Engineering Good Quality Holes in Composite Laminates. *Materials and Manufacturing Processes*, Vol. 32(9), pp. 952-957, 2017. [IF: 1.419]
- [J-2] K. Debnath and I. Singh. Low-Frequency Modulation-Assisted Drilling of Carbon-Epoxy Composite Laminate. *Journal of Manufacturing Processes*, Vol. 25, pp. 262-273, **2017**. [IF: 1.771]
- [J-3] K. Debnath, I. Singh, and A. Dvivedi. On the Analysis of Force During Secondary Processing of Natural Fiber Reinforced Composite Laminates. *Polymer Composites*, Vol. 38(1), pp. 164-174, 2017. [IF: 2.004]
- [J-4] P.K. Bajpai, K. Debnath, and I. Singh. Hole Making in Natural Fiber-Reinforced Polylactic Acid Laminates: An Experimental Investigation. *Journal of Thermoplastic Composite Materials*, Vol. 30(1), pp. 30-46, 2017. [IF: 0.922]
- [J-5] A.V. Singhal, **K. Debnath**, I. Singh, and B.S.S. Daniel. Critical Parameters Affecting Mechanical Behavior of Natural Fiber Reinforced Plastics. *Journal of Natural Fibers*, Vol. 13(6), pp. 640-650, **2016**. [IF: 0.582]
- [J-6] K. Debnath, A. Sisodia, A. Kumar, and I. Singh. Damage-Free Hole Making in Fiber-Reinforced Composites: An Innovative Tool Design Approach. *Materials and Manufacturing Processes*, Vol. 31(10), pp. 1400-1408, 2016. [IF: 1.419]
- [J-7] V. Dhawan, K. Debnath, I. Singh, and S. Singh. Prediction of Forces during Drilling of Composite Laminates Using Artificial Neural Network: A New Approach. *FME-Transactions*, Vol. 44(1), pp. 36-42, **2016**. [ISSN: 1451-2092]
- [J-8] V. Dhawan, K. Debnath, I. Singh, and S. Singh. A Novel Intelligent Software-based Approach to Predict Forces and Delamination during Drilling of Fiber-Reinforced Plastics. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, Vol. 230(2), pp. 603-614, 2016. [IF: 0.793]
- [J-9] V.K. Doomra, K. Debnath, and I. Singh. Drilling of Metal Matrix Composites: Experimental and Finite Element Analysis. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, Vol. 229(5), pp. 886-890, 2015.
 [IF: 0.978]
- [J-10]K. Debnath, I. Singh, and A. Dvivedi. Rotary Mode Ultrasonic Drilling of Glass Fiber-Reinforced Epoxy Laminates. *Journal of Composite Materials*, Vol. 49(8), pp. 949-963, 2015. [IF: 1.242]
- [J-11]D. Varshney, K. Debnath, and I. Singh. Mechanical Characterization of Polypropylene (PP) and Polyethylene (PE) Based Natural Fiber Reinforced Composites. *International Journal of Surface Engineering and Materials Technology*, Vol. 4(1), pp. 16-23, 2014. [ISSN: 2249-7250]
- [J-12]K. Debnath, I. Singh, and A. Dvivedi. Drilling Characteristics of Sisal Fiber-Reinforced Epoxy and Polypropylene Composites. *Materials and Manufacturing Processes*, Vol. 29(11-12), pp.1401–1409, 2014. [IF: 1.419]
- [J-13]K. Debnath, I. Singh, and A. Dvivedi. Evaluation of Surface Roughness during Rotary-Mode Ultrasonic Drilling of Glass/Epoxy Composite Laminates. *Journal of Production Engineering*, Vol. 17(1), pp. 16-20, 2014. [ISSN: 1821-4932]

- [J-14]K. Debnath, V. Dhawan, I. Singh, and A. Dvivedi. Adhesive Wear and Frictional Behavior of Rice Husk Filled Glass/Epoxy Composites. *Journal of Production Engineering*, Vol. 17(1), pp. 21-26, 2014. [ISSN: 1821-4932]
- [J-15]K. Debnath, I. Singh, and A. Dvivedi. Dry Sliding Wear Behaviour of Glass Fibre Reinforced Epoxy Composites Filled with Natural Fillers. *Reason A Technical Journal*, Vol. XII, pp. 61-68, 2013. [ISSN: 2277-1654]

CONFERENCES

- [1] M. Roy Choudhury, **K. Debnath,** and V. Upadhyay. Drilling of Unfilled Hemp/Epoxy and Fly Ash Filled Hemp/Epoxy Composites: Analysis of Force and Temperature. *Twenty-Fifth International Conference on Processing and Fabrication of Advanced Materials* (**PFAM-XXV**), The University of Auckland, Auckland, New Zealand, 22-25th January, **2017**, pp. 750-765.
- [2] K. Debnath, M. Roy Choudhury, S. Chaitanya, I. Singh, and T.S. Srivatsan. Drilling Investigation of Injection Molded Short Sisal Fiber Reinforced Polypropylene Composites. Twenty-Fifth International Conference on Processing and Fabrication of Advanced Materials (PFAM-XXV), The University of Auckland, Auckland, New Zealand, 22-25th January, 2017, pp. 738-749.
- [3] I. Singh, U.K. Komal, P.K. Rakesh and **K. Debnath**. Is Hole Making in Fiber Reinforced Polymers (FRPs) a Challenging Task? *Twenty-Fifth International Conference on Processing and Fabrication of Advanced Materials* (**PFAM-XXV**), The University of Auckland, Auckland, New Zealand, 22-25th January, **2017**, pp. 572-579.
- [4] M. Roy Choudhury, J. Ghosh, V. Upadhyay, and K. Debnath. Influence of Tool Geometry and Cutting Parameters on the Quality of Hole during Drilling of Hemp Fibre Reinforced Composites. *The 4th International Conference on Advances in Materials and Materials Processing* (iCAMMP-iv), Indian Institute of Technology Kharagpur, West Bengal, India, 5-7th November, 2016.
- [5] K. Debnath, M. Sisodia, I. Singh, and T.S. Srivatsan. Design and Development of an Innovative Tool for Making of Good Quality Holes in Composite Laminates. *Twenty-Fourth International Symposium on Processing and Fabrication of Advanced Materials* (PFAM-XXIV), Kansai University, Osaka, Japan, 18-20th December, 2015, pp. 458-465.
- [6] K. Debnath, I. Singh, and T.S. Srivatsan. Innovation in Making of Damage-Free Holes in Fiber-Reinforced Plastics (FRPs). Twenty-Fourth International Symposium on Processing and Fabrication of Advanced Materials (PFAM-XXIV), Kansai University, Osaka, Japan, 18-20th December, 2015.
- [7] V. Dhawan, K. Debnath, I. Singh, and S. Singh. Prediction of Thrust Force during Drilling of Glass Fiber-Reinforced Composite Laminates using Artificial Neural Network. *National Conference on Latest Developments in Materials, Manufacturing and Quality Control* (MMQC-2015), Giani Zail Singh Punjab Technical University Campus, Bathinda, Punjab, India, 19-20th February, 2015, pp. 385-389.
- [8] D. Jindal, K. Debnath, and I. Singh. Seismic Performance of an Unreinforced Masonry Building: Finite Element Analysis. National Conference on Latest Developments in Materials, Manufacturing and Quality Control (MMQC-2015), Giani Zail Singh Punjab Technical University Campus, Bathinda, Punjab, India, 19-20th February, 2015, pp. 380-384.
- [9] V. Dhawan, K. Debnath, and S. Singh. Prediction and Comparison of Thrust Force and Torque in Drilling of Glass/Epoxy Composites Filled with Natural Fillers. *Twenty-Third International Conference on Processing and Fabrication of Advanced Materials* (PFAM-XXIII), Indian Institute of Technology Roorkee, Uttarakhand, India, 5-7th December, 2014, Vol. 1, pp. 170-178.

- [10] V. Dhawan, S. Singh, K. Debnath, and S. Wadhawan. Predictive Modeling of Drilling-Induced Damage in Drilling of Composite Laminates Using Fuzzy Logic. *Twenty-Third International Conference on Processing and Fabrication of Advanced Materials* (PFAM-XXIII), Indian Institute of Technology Roorkee, Uttarakhand, India, 5-7th December, 2014, Vol. 1, pp. 110-118.
- [11] K. Debnath, I. Singh, and A. Dvivedi. Analysis and Modelling of Forces in Drilling of Nettle/Epoxy Composite Laminates. 9th Asian-Australasian Conference on Composite Materials (ACCM-9), Suzhou, China, 15-17th October, 2014.
- [12] K. Debnath, I. Singh, and A. Dvivedi. Comprehensive Analysis of Forces during Drilling of Nettle/Polypropylene Bio-Composites. *International Symposium on Green Manufacturing and Applications* (ISGMA-2014), Busan, South Korea, 24-28th June, 2014.
- [13] K. Debnath, I. Singh, and A. Dvivedi. Drilling Behavior of Natural Fiber Reinforced Polymer (Thermosetting and Thermoplastic) Composites. *Twenty-Second International Conference on Processing and Fabrication of Advanced Materials* (PFAM-XXII), National University of Singapore, Singapore, 18-20th December, 2013, pp. 685-690.
- [14] K. Debnath, I. Singh, and A. Dvivedi. Vibration-Assisted Drilling of Carbon Fiber Reinforced Composites. *Twenty-Second International Conference on Processing and Fabrication of Advanced Materials* (PFAM-XXII), National University of Singapore, Singapore, 18-20th December, 2013.
- [15] K. Debnath, V. Dhawan, I. Singh, and A. Dvivedi. Effect of Natural Fillers on Wear Behavior of Glass Fiber Reinforced Epoxy Composites. *International Conference on Research and Innovations in Mechanical Engineering* (ICRIME-2013), Guru Nanak Dev Engineering College, Ludhiana, India, 24-26th October, 2013, pp. 441-450.
- [16] V. Dhawan, K. Debnath, I. Singh, and S. Singh. Drilling of Glass Fibre Reinforced Epoxy Laminates with Natural Fillers: Thrust Force Analysis. *International Conference on Research and Innovations in Mechanical Engineering* (ICRIME-2013), Guru Nanak Dev Engineering College, Ludhiana, India, 24-26th October, 2013, pp. 105-115.
- [17] K. Debnath, I. Singh, and A. Dvivedi. Rotary Ultrasonic Drilling of Glass/Epoxy Composite Laminates. *International Conference and Exhibition on Reinforced Plastics* (ICERP-2013), Bombay Exhibition Center, Mumbai, India, 4-6th April, 2013.
- [18] K. Debnath, I. Singh, and A. Dvivedi. Development and Tribological Characterization of GFRP Laminates with Natural Fillers. 4th International and 25th All India Manufacturing Technology, Design and Research Conference (AIMTDR-2012), Jadavpur University, West Bengal, India, 14-16th December, 2012, Vol. II, pp. 771-775.
- [19] K. Debnath, I. Singh, and A. Dvivedi. Ultrasonic Vibration Assisted Hole Making in Glass-Epoxy Laminates. *Twenty-First International Symposium on Processing and Fabrication of Advanced Materials* (PFAM-XXI), Indian Institute of Technology Guwahati, Assam, India, 10-13th December, 2012, Vol. II, pp. 969-974.
- [20] S. Biswas, K. Debnath, and A. Patnaik. Mechanical Behavior of Short Bamboo Fiber Reinforced Epoxy Composites Filled with Alumina Particulate. *Kathmandu Symposia on Advanced Materials* (KASAM-2012), Nepal Polymer Institute, Kathmandu, Nepal, 9-12th May, 2012.
- [21] K. Debnath, A. Dvivedi, and I. Singh. Wear Behavior of Glass/Epoxy Composites Filled with Rice Husk. *Third International Multicomponent Polymer Conference* (IMPC-2012), Mahatma Gandhi University, Kottayam, Kerala, India, 23-25th March, 2012.
- [22] S. Biswas and K. Debnath. Effect of Alumina Particulate on Erosion Wear Behaviour of Short Bamboo Fiber Reinforced Epoxy Composites. 11th Annual UNESCO/IUPAC Workshop and

- Conference on Functional Polymeric Materials and Composites (FPMC-2011), University of Stellenbosch, South Africa, 26-29th April, **2011**.
- [23] K. Debnath and S. Biswas. Mechanical Behavior of Particulate Filled Short Glass Fiber Reinforced Epoxy Composites: Effect of Filler Type and Content. *International Conference on Advances in Polymer Science and Rubber Technology* (APSRT-2011), Indian Institute of Technology Kharagpur, West Bengal, India, 3-5th March, 2011.

BOOK CHAPTERS

[1] Book Title: PRIMARY AND SECONDARY MANUFACTURING OF POLYMER

MATRIX COMPOSITES

Chapter 02: Primary Manufacturing of Thermoplastic Polymer Matrix Composites

Authors: K. Debnath, M. Roy Choudhury, and Anders E.W. Jarfors

Publisher: CRC Press (Taylor & Francis Group), USA

Year: **2017**

ISBN: 978-1-4987-9930-0

[2] Book Title: PRIMARY AND SECONDARY MANUFACTURING OF POLYMER

MATRIX COMPOSITES

Chapter 09: Secondary Manufacturing Techniques for Polymer Matrix Composites

Authors: K. Debnath, M. Roy Choudhury, and T.S. Srivatsan

Publisher: CRC Press (Taylor & Francis Group), USA

Year: 2017

ISBN: 978-1-4987-9930-0

[3] Book Title: PRIMARY AND SECONDARY MANUFACTURING OF POLYMER

MATRIX COMPOSITES

Chapter 12: Research Progress in the Area of Advanced Machining of Polymer Matrix

Composites

Authors: K. Debnath, M. Roy Choudhury, and J.I. Song Publisher: CRC Press (Taylor & Francis Group), USA

Year: **2017**

<u>ISBN:</u> 978-1-4987-9930-0

[4] Book Title: BIODEGRADABLE POLYMERIC NANOCOMPOSITES:

ADVANCES IN BIOMEDICAL APPLICATIONS

Chapter 05: Polylactic Acid-Based Bionanocomposites: A State-of-the-Art Review

Report

Authors: I. Singh and K. Debnath

Publisher: CRC Press (Taylor & Francis Group), USA

Year: **2016, Page: 95-108 ISBN:** 9781482260519

[5] Book Title: PROCESSING TECHNIQUES AND TRIBOLOGICAL BEHAVIOR OF

COMPOSITE MATERIALS

Chapter 11: Advanced Machining Techniques for Fiber-Reinforced Polymer Composites

I. Singh and K. Debnath

Authors: *IGI Global, USA*Publisher: **2015, Page: 317-340**Year: 9781466675308

ISBN:

[6] Book Title: MANUFACTURING ENGINEERING: NEW RESEARCH

Chapter 04: Optimal Control of Drilling Process for Hole Making in Fiber Reinforced

Plastics: A Review

Authors: A.P. Singh, **K. Debnath**, M. Sharma, and I. Singh

Publisher: Nova Science Publishers, USA

Year: **2015, Page: 33-50 ISBN:** 978-1-63463-396-3

[7] Book Title: LIGNOCELLULOSIC POLYMER COMPOSITES: PROCESSING,

CHARACTERIZATION, AND PROPERTIES

Chapter 18: Mechanical Behavior of Biocomposites under Different Operating

Environments

Authors: I. Singh, **K. Debnath**, and A. Dvivedi

Publisher: **John Wiley & Sons, USA** Year: **2014, Page: 417-431 ISBN:** 978-1-118-77398-7 [8] Book Title: RECENT ADVANCES IN COMPOSITE MATERIALS FOR WIND

TURBINE BLADES

Chapter 02: Natural Fiber Reinforced Polymer Composites for Wind Turbine Blades:

Challenges and Opportunities

Authors: K. Debnath, I. Singh, A. Dvivedi, and P. Kumar Publisher: World Academic Publishing, HONG KONG

Year: **2013, Page: 25-39 ISBN:** 978-0-9889190-0-6

[9] Book Title: BIOMASS-BASED BIOCOMPOSITES

Chapter 08: Joining of Natural Fiber Reinforced Thermoplastic Composites

Authors: I. Singh, **K. Debnath**, and A. Dvivedi Publisher: **Smithers Rapra Publishing**, **UK**

Year: **2013, Page: 145-165 ISBN:** 978-1-84735-980-3

BOOKS

[1] Book Title: PRIMARY AND SECONDARY

MANUFACTURING OF POLYMER

MATRIX COMPOSITES

Authors: K. Debnath and I. Singh

Publisher: CRC Press (Taylor & Francis Group), USA

Year: 2017
Total Pages: XXX

ISBN: 978-1-4987-9930-0



[2] Book Title: MECHANICAL AND EROSION WEAR

BEHAVIOR OF NATURAL FIBER

COMPOSITES

Authors: **K. Debnath** and S. Biswas

Publisher: LAP Lambert Academic Publishing, GmbH

& Co. KG, GERMANY

Year: 2013 Total Pages: 69

ISBN: 978-3-659-40414-6



Mechanical and Erosion Wear Behavior of Natural Fiber Composites

